



HYUNDAI

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NEW POSSIBILITIES.

Technical Service Bulletin

GROUP

RECALL

NUMBER

17-01-015

DATE

FEBRUARY 2017

MODEL(S)

Elantra (ADa)

SUBJECT:

**2017 ELANTRA (ADA) BRAKE BOOSTER REPLACEMENT
(RECALL CAMPAIGN 157)**

★ IMPORTANT

***** Dealer Stock and Retail Vehicles *****

Dealers must perform this Recall Campaign on all affected vehicles prior to customer retail delivery and whenever an affected vehicle is in the shop for any maintenance or repair.

When a vehicle arrives at the service department, access Hyundai Motor America's "Warranty Vehicle Information" screen via WEBDCS to identify open Campaigns.

Description: On affected 2017 MY ADa Elantra sedans, the diaphragm in the brake booster may unseat, resulting in a vacuum leak and reduction or loss of power brake assist. A malfunctioning brake booster could increase stopping distances, increasing the risk of a crash. This bulletin describes the procedure to replace the brake vacuum booster.



Applicable Vehicles: Certain 2017 MY Elantra (ADa) vehicles produced at Hyundai Motor Manufacturing Alabama (VIN beginning with a "5") from September 12, 2016 through January 18, 2017.

Circulate To: General Manager, Service Manager, Parts Manager, Warranty Manager, Service Advisors, Technicians, Body Shop Manager, Fleet Repair

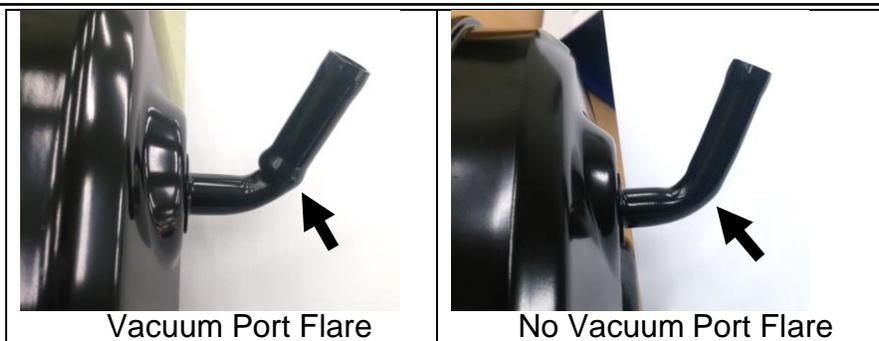
Parts Information:

PART NAME	PART NUMBER	QTY	FIGURE
Brake Vacuum Booster (2.0L Engine, ATM/MTM)	59110-F3000QQH	1	
Brake Vacuum Booster (1.4L Engine, DCT)	59110-F3200QQH	1	
DOT 4 Brake Fluid*	00232-19053	As needed	-

*Brake fluid only needed for 1.4L and 2.0L MTM.

NOTICE

Some brake vacuum boosters may have a flared vacuum port. Brake vacuum boosters with either style vacuum port are interchangeable and can be used for this repair.



Warranty Information:

OP Code	Operation	OP Time	Causal Part No.	Nature Code	Causal Code
71CA04R1	Brake Vacuum Booster Replace 2.0L ATM	0.7	59110F3000	D72	ZZ5
71CA04R2	Brake Vacuum Booster Replace 2.0L MTM	1.0	59110F3000	D72	ZZ5
71CA04R3	Brake Vacuum Booster Replace 1.4L	1.0	59110F3200	D72	ZZ5

NOTE 1: Submit Claim on Campaign Claim Entry Screen.

NOTE 2: Labor operations 71CA04R2 and 71CA04R3 will reimburse 1.5 bottles (18 fl. oz.) brake fluid in sublet.

NOTE 3: If a part is found in need of replacement while performing Recall 157 and the affected part is still under warranty, submit a separate claim using the same Repair Order. If the affected part is out of warranty submit a Prior Approval Request for goodwill consideration prior to performing the work.

Service Procedure:

NOTICE

There are two service procedures:

- Service procedure 1 is for 2.0L vehicles with automatic transmission (pages 3-6).
- Service procedure 2 is for 1.4L or 2.0L vehicles with manual transmissions (pages 7-11).

Service Procedure 1 (2.0L ATM):

1. If applicable, record the customer's radio preset stations for AM/FM/XM.
2. Turn ignition switch OFF and disconnect the negative (-) battery cable.

Battery (-) terminal nut tightening torque:

7.8 ~ 9.8 N.m
(0.8 ~ 1.0 kgf.m, 5.8 ~ 7.2 lb-ft)



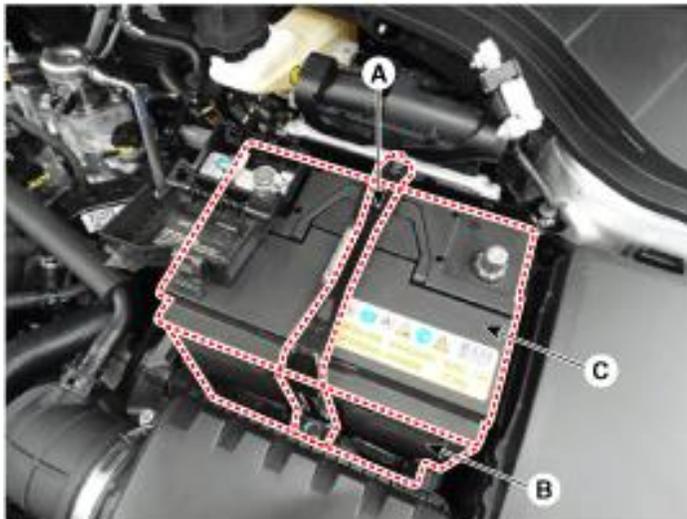
3. Disconnect the battery cable from the B+ terminal.

Battery (+) terminal nut tightening torque:

7.8 ~ 9.8 N.m
(0.8 ~ 1.0 kgf.m, 5.8 ~ 7.2 lb-ft)



4. Remove the battery mounting bracket (A). Remove the battery insulation pad after removing the battery (B).

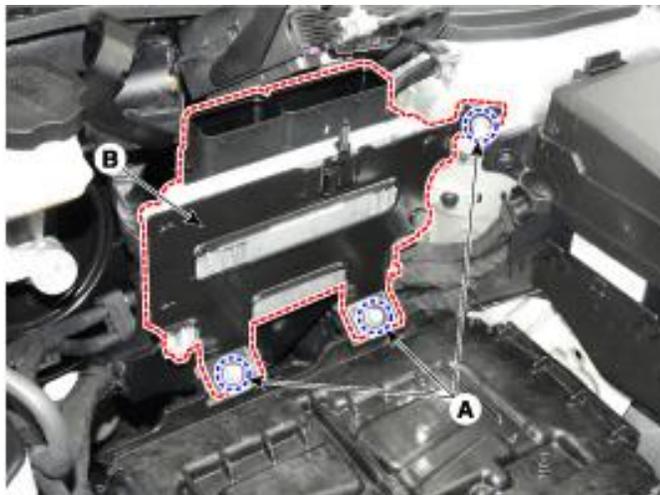


5. Remove the ECM connectors (A).



6. Loosen the mounting bolts (A) and then remove the ECM bracket (B).

Tightening torque:
 9.8 ~ 11.8 N.m
 (1.0 ~ 1.2 kgf.m, 7.2 ~ 8.7 lb-ft)



7. Disconnect the brake fluid level switch connector.



8. Remove the vacuum hose (A).



9. Remove the wiring fixed clip.



10. Remove the two mounting nuts from the master cylinder and carefully place the master cylinder aside.

Tightening torque:

12.7 ~ 16.7 N.m
(1.3 ~ 1.7 kgf.m, 9.4 ~ 12.3 lb-ft)



11. Remove the snap pin (A) and clevis pin (B) where the brake booster attaches to the brake pedal.

NOTICE

- Prior to reinstallation, grease the clevis pin.



12. Remove the mounting nuts (A).

Tightening torque:

16.7 ~ 25.5 N.m
(1.7 ~ 2.6 kgf.m, 12.3 ~ 18.8 lb-ft)



13. Remove the brake booster.

14. Install the new brake booster. Reinstall the parts in the reverse order of removal.

Service Procedure 2 (1.4L and 2.0L MTM):

1. If applicable, record the customer's radio preset stations for AM/FM/XM.
2. Turn the ignition switch OFF and disconnect the negative (-) battery cable.

Battery (-) terminal nut tightening torque:

7.8 ~ 9.8 N.m

(0.8 ~ 1.0 kgf.m, 5.8 ~ 7.2 lb-ft)



3. Disconnect the battery cable from the B+ terminal.

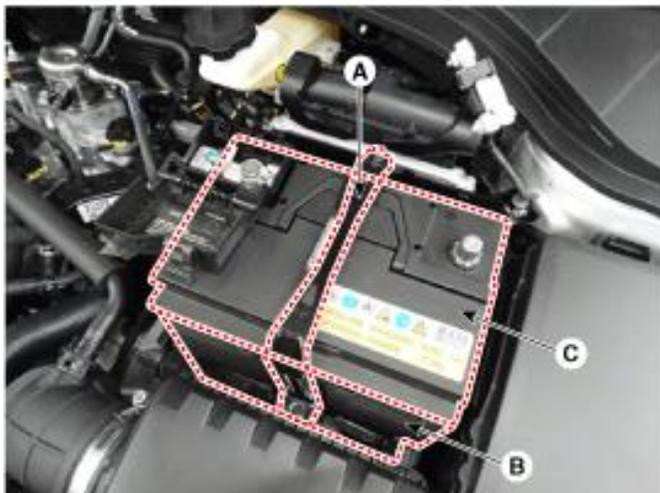
Battery (+) terminal nut tightening torque:

7.8 ~ 9.8 N.m

(0.8 ~ 1.0 kgf.m, 5.8 ~ 7.2 lb-ft)



4. Remove the battery mounting bracket (A). Remove the battery insulation pad after removing the battery (B).



5. Remove the ECM connectors (A).

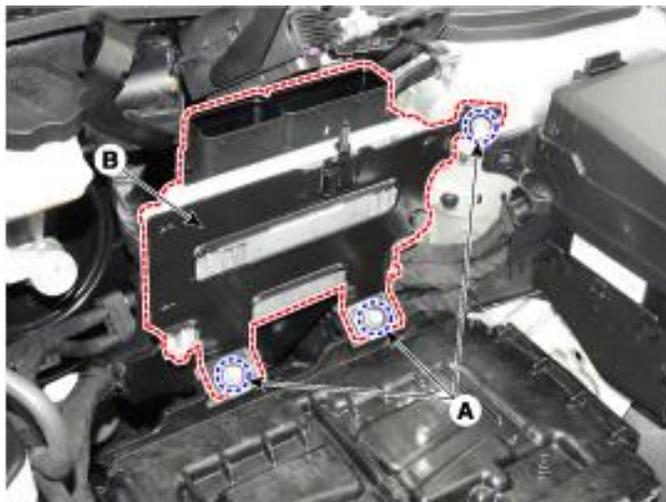


6. Loosen the mounting bolts (A) and then remove the ECM bracket (B).

Tightening torque:

9.8 ~ 11.8 N.m

(1.0 ~ 1.2 kgf.m, 7.2 ~ 8.7 lb-ft)



7. Disconnect the brake fluid level switch connector.



8. Remove the vacuum hose (A).



9. Remove the brake fluid from the master cylinder reservoir with a syringe.

CAUTION

Do not spill brake fluid on the vehicle, it may damage the paint. If brake fluid does contact the paint, wash it off immediately with water.

10. Remove the wiring fixed clip.
11. Disconnect the booster pressure sensor (1.4L only).



12. Remove the clutch brake hose.
(M/T only)



13. Disconnect the brake tube (A) from the master cylinder by loosening the tube flare nut.

Tightening torque:

ESP: 18.6 ~ 22.6 N.m

(1.9 ~ 2.3 kgf.m, 13.7 ~ 16.6 lb-ft)

ABS: 12.7 ~ 16.7 N.m

(1.3 ~ 1.7 kgf.m, 9.4 ~ 12.3 lb-ft)



14. Remove the master cylinder from the brake booster after removing the mounting nuts (A).

Tightening torque:

12.7 ~ 16.7 N.m

(1.3 ~ 1.7 kgf.m, 9.4 ~ 12.3 lb-ft)



15. Remove the snap pin (A) and clevis pin (B).

NOTICE

- Prior to reinstallation, grease the clevis pin.



16. Remove the mounting nuts (A).

Tightening torque:

16.7 ~ 25.5 N.m

(1.7 ~ 2.6 kgf.m, 12.3 ~18.8 lb-ft)



17. Remove the brake booster.

18. Install the new brake booster. Reinstall the parts in the reverse order of removal.

19. After installing, bleed air from the system:

- (Refer to Brake System – “Brake System Bleeding”)
- (Refer to Brake System – “ABS System Bleeding”)
- (Refer to Brake System – “ESP System Bleeding”)